Claims 1-11, 13 and 20-22 have been cancelled, claims 24-32 are newly presented for examination, and claims 12, 14-19 and 23-32 are pending in the application. A Request for Continued Examination and one month Petition for Extension of time are concurrently submitted herewith.

As Claim 13 has been cancelled, Claims 14-19 have been amended to depend from independent Claim 12.

Independent claim 12

Independent Claim 12 stands rejected under 35 U.S.C. § 103(a) as being obvious based on a hypothetical combination of U.S. Patent No. 5,892,855 to Kakinami et al. to Yankowich et al., "A Hough Transform based multisensor, multitarget track initiation technique", 1997.

Applicants respectfully submit that motivation to combine the features of Kakinami et al. and Shyu cannot be found in either reference, further that, the hypothetical combination of references would not have all the features of independent claim 12.

Nonetheless, Claim 12 has been amended to expedite prosecution and clarify the differences between the claim and the references. In particular, Claim 12 now recites that the system includes a plurality of distributed linear arrays of sensors for receiving signals from a target, each array of sensors comprising at least two sensors, said sensor arrays being non-parallel. Claim 12 further recites a computer system retrieving the stored digitized data from the plurality of sensor arrays and applying a composite Hough transform to a delay curve

corresponding to a first of the sensor arrays and to a delay curve corresponding to a second of the sensor arrays to determine a track of the target.

Kakinami et al. and Yankowich et al., either singly or in combination, fail to disclose a system having all the features of Claim 12.

Applicants note that the feature of an "analog/digital converter for converting the signals received from the sensor arrays to a digital format, if signals are received in an analog format", has been deleted from Claim 12, as it is believed to be not necessary for patentability.

Support for the amended claim language is found at least at Figure 4b.

Applicants request withdrawal of the rejections of independent claim 12 and dependent claims 12-19 for at least the foregoing reasons.

Independent Claim 23

Independent Claim 23 stands rejected based on Kakinami et al. and Shyu "Applying Morphological Filters", 1997.

Independent Claim 23 has similarly been amended to recite that the at least two sensor arrays each include at least two sensors, the sensor arrays being arranged non-parallel to each other. Thus amended, Claim 23 is directed to a method of processing data from at least two sensor arrays at least two to determine the track of a target, the sensor arrays each include at least two sensors, the sensor arrays being arranged non-parallel to each other, the method including: computing a hypothesis reference track relative to a primary sensor array of the at least two sensor arrays; computing a hypothesis reference track relative to a second sensor array of the at

least two sensor arrays; calculating an associated delay curve in a primary correlogram for the primary sensor array; calculating an associated delay curve in a secondary correlogram for a secondary array; accumulating data for the reference track by integrating a series of pixel values along the appropriate delay curve in the primary and secondary correlograms; storing the accumulated pixel values in composite Hough space; and thresholding the accumulated pixel values to detect the track.

Applicants respectfully submit Shyu does not disclose a method for processing data from at least two sensor arrays, each sensor array including at least two sensors. Instead, Shyu discloses a method for use of a Hough transform on a correlogram that is based on two sensors in a single array. The potential for target tracking problems using a single linear array as disclosed in Shyu is discussed in the present application at pages 1-6 and in particular at the paragraph bridging pages 4 and 5 of this application. Nor does Shyu disclose that two sensor arrays are non-parallel with each other, as recited in Claim 23.

Kakinami et al. fails to remedy at least these deficiencies of Shyu. Accordingly, even a hypothetical combination of Shyu and Kakinami et al. would not have all the features set forth in Claim 23. Applicants therefore request withdrawal of the rejections of Claim 23 under 35 USC 103(b) and allowance of Claim 23 and dependent Claims 24 -28.

New Claims

New Claims 29-32 are presented to set forth additional subject matter to which the applicants are believed to be entitled. No new matter has been added.

Conclusion

The Application is believed to be in condition for allowance. An early indication of the allowability of the application is respectfully solicited. Should Examiner Akhavannik believe that a telephone interview would be helpful in resolving any issues regarding this Amendment or

the application in general, he is cordially invited to contact the undersigned at the telephone

number listed below.

Respectfully Submitted,

Sally a Fenets
Sally A. Ferrett

Registration No. 46,325

U.S. Naval Research Laboratory 4555 Overlook Ave., SW, Code 1008.2 Washington, DC 20375 (202) 404-1551

Date: July 12, 2005